

## Node 1 MDM State Transitional Matrixes

|                    | N1-2 Transition   |                |                  |                |                    |
|--------------------|-------------------|----------------|------------------|----------------|--------------------|
| Initial N1-1 State | Prim => Off, Diag | Prim => Stdbby | Off/Diag => Prim | Stdbby => Prim | Stdbby => Diag/Off |
| Primary            | 1                 | 1              | B                | B              | D                  |
| Secondary          | A                 | A              | 1                | 1              | 3                  |
| Standby            | A                 | A              | 1                | 1              | 3                  |
| Diag/Off           | 2                 | 3              | C(TBD)           | 1              | 3                  |

|                 | N1-1 Transition |                  |              |                      |                  |                      |                  |
|-----------------|-----------------|------------------|--------------|----------------------|------------------|----------------------|------------------|
| Init N1-2 State | Prim => Sec     | Prim => Off/Diag | Prim => Stby | Sec => Off/Diag/Stby | Off/Diag => Prim | Off/Diag/Stby => Sec | Stby => Off/Diag |
| Primary         | 1               | 1                | 1            | G                    | 1                | I                    | J                |
| Standby         | E               | F                | F            | 1                    | 1                | 1                    | 3                |
| Diag/Off        | 3               | 2                | 3            | 1                    | H(TBD)           | 1                    | 3                |

### ACTIONS

A = Transitioning N1-2 to Dgnstc/Stby/Off from Prim & N1-1 to Prim from Stby/Sec  
 B = Transitioning N1-2 to Prim from Off/Dgnstc/Stby while N1-1 is Prim  
 C = Transitioning N1-2 to Prim from Off/Dgnstc while N1-1 is Off/Dgnstc  
 D = Transitioning N1-2 to Dgnstc from Stby while N1-1 is Prim  
 E = Transitioning N1-1 to Sec from Prim & N1-2 to Prim from Stby  
 F = Transitioning N1-1 to Off/Dgnstc/Stby from Prim & N1-2 to Prim from Stby  
 G = Transitioning N1-1 to Off/Dgnstc/Stby from Sec while N1-2 is Prim  
 H = Transitioning N1-1 to Prim from Off/Dgnstc while N1-2 is Off/Dgnstc  
 I = Transitioning N1-1 to Sec from Off/Dgnstc/Stby while N1-2 is Prim  
 J = Transitioning N1-1 to Off/Dgnstc from Stby while N1-2 is Prim

### RESULTING STATES

N1-1=Prim                      N1-2=Off/Dgnstc/Stby  
 N1-1=Sec                        N1-2=Prim  
 N1-1=Off/Dgnstc               N1-2=Prim  
 N1-1=Prim                       N1-2=Dgnstc  
 N1-1=Sec                        N1-2=Prim  
 N1-1=Off/Dgnstc/Stby        N1-2=Prim  
 N1-1=Off/Dgnstc/Stby        N1-2=Prim  
 N1-1=Prim                       N1-2=Off/Dgnstc  
 N1-1=Sec                        N1-2=Prim  
 N1-1=Off/Dgnstc               N1-2=Prim

### Notes:

1 = Illegal States  
 2 = Operationally Feasible, but will lose both boxes at 2 A.  
 3 = Unstable States. Feasible, but will automatically go back to the original configuration.